

Appln. No. : 10/799,789
Amdt. Dated : June 7, 2005
Reply to Office action of : March 11, 2005
Page 2 of 9

Amendment to the Claims:

This listing of the claims will replace all prior versions and listings of the claims in this application.

Listing of Claims:

1. (canceled)
2. (currently amended) The method defined in claim ~~[[1]]~~ 10, wherein the step of operating the trimming tool includes shaving the protruding end of the sleeve liner to a condition flush with a top surface of the engine component.
3. (currently amended) The method defined in claim ~~[[1]]~~ 10, wherein the stop mechanism includes a thrust bearing on one of the trimming tool and the holder that engage to limit axial motion of the trimming tool, and including a step of engaging the thrust bearing to limit the axial motion of the trimming tool.
4. (currently amended) The method defined in claim ~~[[1]]~~ 10, wherein the step of securing includes aligning an axis of rotation of the trimming tool with an axial centerline of the cylinder bore.
5. (currently amended) The method defined in claim ~~[[1]]~~ 10, including a step of suctioning away debris during the step of operating the trimming tool.
6. (currently amended) The method defined in claim ~~[[1]]~~ 10, wherein the trimming tool includes a cutting head and the holder defines a wall defining a pocket for receiving and housing the cutting head, and the method includes attaching a suctioning device to the wall and operating the suctioning device.

Appln. No. : 10/799,789
Amdt. Dated : June 7, 2005
Reply to Office action of : March 11, 2005
Page 3 of 9

7. (previously presented) The method defined in claim 6, wherein the suctioning device includes an inlet passageway and an outlet passageway both configured to cause a suction when air is passed therethrough, and including a step of motivating air through the inlet and outlet passageways.

8. (currently amended) ~~The method defined in claim 7,~~ A method for trimming a newly-installed sleeve liner after the liner is positioned in a cylinder bore of a combustion engine component, comprising steps of:

providing a trimmer including a trimming tool adapted to trim a protruding end of the newly-installed sleeve liner and including a tool holder operably supporting the trimming tool, the tool holder having a first section shaped and adapted to stably engage the combustion engine component and to receive the protruding end of the sleeve liner and also having a second section operably supporting the trimming tool for rotation and for axial movement toward a selected cylinder bore when the tool holder is attached to the combustion engine component;

setting a stop mechanism to limit the trimming tool to cutting only down to a flush condition on the engine component;

securing the tool holder to a face of the engine component; and

operating the trimming tool to shave off the protruding end;

wherein the trimming tool includes a cutting head and the holder defines a wall defining a pocket for receiving and housing the cutting head, and the method includes attaching a suctioning device to the wall and operating the suctioning device;

wherein the suctioning device includes an inlet passageway and an outlet passageway both configured to cause a suction when air is passed therethrough, and including a step of motivating air through the inlet and outlet passageways; and

wherein the inlet and outlet passageways are aligned to form a continuous passageway that extends at a tangential angle to the pocket, with an intermediate portion of the continuous passageway opening into the pocket and with a shaped orifice in the continuous passageway to cause air flow resulting in a vacuum.

Appln. No. : 10/799,789
Amdt. Dated : June 7, 2005
Reply to Office action of : March 11, 2005
Page 4 of 9

9. (currently amended) The method defined in claim ~~[[1]]~~ 10, wherein the stop mechanism includes a stop on one of the trimming tool and the tool holder and is adjustable, and the other of the trimming tool and the tool holder has a mating surface that abuts the stop to limit longitudinal movement of the trimming tool relative to the tool holder, and including a step of adjusting the stop to cause a longitudinal movement of a cutter on the trimming tool to stop cutting when the protruding end of the sleeve liner is trimmed to a condition flush with a top of the material forming the selected bore cylinder.

10. (currently amended) ~~The method defined in claim 1,~~ A method for trimming a newly-installed sleeve liner after the liner is positioned in a cylinder bore of a combustion engine component, comprising steps of:

providing a trimmer including a trimming tool adapted to trim a protruding end of the newly-installed sleeve liner and including a tool holder operably supporting the trimming tool, the tool holder having a first section shaped and adapted to stably engage the combustion engine component and to receive the protruding end of the sleeve liner and also having a second section operably supporting the trimming tool for rotation and for axial movement toward a selected cylinder bore when the tool holder is attached to the combustion engine component;

setting a stop mechanism to limit the trimming tool to cutting only down to a flush condition on the engine component;

securing the tool holder to a face of the engine component;

operating the trimming tool to shave off the protruding end; and

wherein the tool holder includes a tie-down device comprising a clamp plate engaging the first section, the clamp plate including first holes, and also includes bolts adapted for engaging mating threaded holes in the engine component, and wherein the step of securing the tool holder includes extending the bolts through the threading the first holes and into threaded engagement with the threaded holes.

11. (currently amended) The method defined in claim ~~[[1]]~~ 10, wherein the trimming tool

Appln. No. : 10/799,789
Amdt. Dated : June 7, 2005
Reply to Office action of : March 11, 2005
Page 5 of 9

has a drive shank adapted for attachment to a hand-held manually-operated drill, and wherein the step of operating the trimming tool includes rotating the trimming tool by using the drill.

12. (previously presented) The method defined in claim 11, wherein the second section of the tool holder has a bore neck, and the trimming tool includes a shaft that is rotatable and also axially shiftable in the bore neck, and wherein the trimming tool further includes a coupler that permits misalignment of the drill and the shaft while permitting forced rotation and translation of the trimming tool.

13. (currently amended) The method defined in claim ~~[[1]]~~ 10, wherein the trimming tool includes a cutter rotatable about an axis of rotation, and the step of securing includes aligning the axis of rotation with a centerline of the cylinder bore so that when the cutter is rotated to trim an end of the liner, any score lines formed by the cutter on the trimmed end extend circumferentially and do not crisscross radially across the trimmed end.

14. (currently amended) ~~The method defined in claim 1,~~ A method for trimming a newly-installed sleeve liner after the liner is positioned in a cylinder bore of a combustion engine component, comprising steps of:

providing a trimmer including a trimming tool adapted to trim a protruding end of the newly-installed sleeve liner and including a tool holder operably supporting the trimming tool, the tool holder having a first section shaped and adapted to stably engage the combustion engine component and to receive the protruding end of the sleeve liner and also having a second section operably supporting the trimming tool for rotation and for axial movement toward a selected cylinder bore when the tool holder is attached to the combustion engine component;

setting a stop mechanism to limit the trimming tool to cutting only down to a flush condition on the engine component;

securing the tool holder to a face of the engine component;

operating the trimming tool to shave off the protruding end; and

Appln. No. : 10/799,789
Amdt. Dated : June 7, 2005
Reply to Office action of : March 11, 2005
Page 6 of 9

including a step of providing a cylinder bore plug shaped to fill a cross-sectional area of the selected cylinder bore to prevent loose material and debris from falling into the selected cylinder bore during the step of operating the trimming tool, and including a step of positioning the cylinder bore plug in the selected cylinder bore.

15. (canceled)

16. (canceled)

17. (canceled)

18. (canceled)

19. (currently amended) ~~The method defined in claim 18, including steps of~~ A method of repairing a combustion engine component with a damaged cylinder bore, where a friction-fit sleeve liner of bearing material is positioned in the damaged cylinder bore to repair the cylinder bore, comprising steps of:

providing an apparatus including a trimming tool having a cutter adapted to shave off a protruding end of the newly-installed sleeve liner, the cutter being rotatable about a centerline that is adapted to be positioned collinearly with a centerline of the cylinder bore; the apparatus also including a tool holder for stably engaging the engine component and for operably supporting the trimming tool;

attaching the trimming tool to the combustion engine component, including holding the trimming tool for rotation over the selected cylinder bore with the centerline of the cutter aligned with the centerline of the cylinder bore;

rotating and extending the trimming tool to trim a protruding end of the liner;

providing a suction device on the tool holder and a collection bag on the suction device; operating the suctioning device to draw away debris during the stop of rotating and extending, including collecting the debris; and

Appln. No. : 10/799,789
Amdt. Dated : June 7, 2005
Reply to Office action of : March 11, 2005
Page 7 of 9

providing a coupler atop the trimming tool and providing a drill attached to the coupler; ~~and~~ wherein the step of rotating and extending the trimming tool includes operating the drill to rotate and axially extend the trimming tool, with the coupler compensating for misalignment of a centerline of rotation of the drill and the centerline of rotation of the trimming tool.

20. (currently amended) ~~The method defined in claim 17, including steps of:~~ A method of repairing a combustion engine component with a damaged cylinder bore, where a friction-fit sleeve liner of bearing material is positioned in the damaged cylinder bore to repair the cylinder bore, comprising steps of:

providing an apparatus including a trimming tool having a cutter adapted to shave off a protruding end of the newly-installed sleeve liner, the cutter being rotatable about a centerline that is adapted to be positioned collinearly with a centerline of the cylinder bore; the apparatus also including a tool holder for stably engaging the engine component and for operably supporting the trimming tool;

attaching the trimming tool to the combustion engine component, including holding the trimming tool for rotation over the selected cylinder bore with the centerline of the cutter aligned with the centerline of the cylinder bore; and

providing a plug for filling a cross-sectional area of the cylinder bore, and inserting the plug into the bore to catch debris caused by the step of rotating and extending the trimming tool to trim the protruding end.

21. (new) The method defined in claim 14, wherein the bore plug includes a foam piece that sits on a piston in the cylinder bore.

22. (new) The method defined in claim 14, wherein the trimming tool includes a cutting head and the holder defines a wall defining a pocket for receiving and housing the cutting head, and the method includes attaching a suctioning device to the wall and operating the suctioning device.

Appln. No. : 10/799,789
Amdt. Dated : June 7, 2005
Reply to Office action of : March 11, 2005
Page 8 of 9

23. (new) The method defined in claim 19, wherein the coupler includes a universal coupler and a socket coupler that releasably engages the universal coupler.

24. (new) The method defined in claim 19, wherein the centerline of rotation of the drill and the centerline of rotation of the trimming tool are in substantial alignment.

25. (new) The method defined in claim 19, wherein the drill is a motorized hand drill.